DOCUMENT RESUME

ED 480 694 SP 041 732

AUTHOR	Hughes, Linda A.
TITLE	ARTC: Alternative Routes to Certification. Report to the Delaware Department of Education, May 2002.
INSTITUTION	Delaware Univ., Newark.
SPONS AGENCY	Delaware State Dept. of Education, Dover.
PUB DATE	2002-05-00
NOTE	40p.; Prepared by the Delaware Center for Teacher Education. Published annually.
AVAILABLE FROM	For full text: http://www.udel.edu/artc/documents/2002MayDOEreport.pdf.
PUB TYPE	Numerical/Quantitative Data (110) -- Reports - Descriptive (141) -- Tests/Questionnaires (160)
EDRS PRICE	EDRS Price MF01/PC02 Plus Postage.
DESCRIPTORS	*Alternative Teacher Certification; Career Choice; Elementary Secondary Education; Enrollment Trends; Higher Education; Preservice Teacher Education; Prior Learning; Student Characteristics; Student Recruitment; Student Teachers; Teacher Characteristics; Teacher Persistence; Tenure
IDENTIFIERS	*Delaware

ABSTRACT

This first section of this report profiles the first five Alternative Routes to Certification (ARTC) cohorts (1997-98 through 2001-02), including patterns of district and school participation and characteristics of all 164 candidates enrolled by district during the first 5 years. It addresses the question of who participates in ARTC. The second section considers patterns of attrition among candidates in the first four cohorts, examining whether those who complete their ARTC courses differ from all candidates enrolled or from those who do not complete their courses. The third section summarizes key findings from a follow-up survey of supervisors of the first four cohorts, discussing whether those who complete their ARTC courses stay and succeed in Delaware schools and focusing on retention, certification status, tenure status, and overall performance. The fourth section presents current completion and enrollment projections for the 2001-02 and 2002-03 cohorts. The fifth section summarizes the report's major findings regarding patterns and prospects (meeting goals, patterns of growth, changing enrollment patterns, who succeeds and who does not, and future directions). An appendix presents the survey of supervisors of ARTC graduates, February 2001. (Contains 16 tables and 6 figures.) (SM)

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ARTC
Alternative Routes to Certification

REPORT TO THE

DELAWARE DEPARTMENT OF EDUCATION

MAY 2002

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Overview of This Report

PART I profiles the first five ARTC cohorts (1997 – 1998 through 2001 – 2002), including patterns of district and school participation, and characteristics of all 164 candidates enrolled by districts during the first five years. It addresses the question: Who participates in ARTC?

PART II considers patterns of attrition (failure to complete ARTC course work) among candidates in the first four cohorts (1997 – 1998 through 2000 – 2001). It addresses the question: Do those who complete their ARTC courses differ from all candidates enrolled or from those who do not complete their courses?

PART III summarizes key findings of a survey of supervisors of the first four cohorts (1997 – 1998 through 2000 – 2001) of ARTC graduates. It addresses the question: Are those who complete their ARTC courses staying and succeeding in Delaware schools?

PART IV presents current completion and enrollment projections for the 2001 – 2002 and 2002 – 2003 cohorts. It answers the question: Where are we now?

PART V summarizes the major findings of this report and addresses the question: What have we learned and where are we going?

PART I

Profile of ARTC Candidates
1997 – 1998 to 2001 – 2002 Cohorts

Program Participation

Between August 1997 and September 2001, ARTC participation was very broad across the state (Table I-1):

- 94% of regular public school districts (15 of 16)
- one-third of vocational school districts (1 of 3)
- 3 charter schools
- 75% of Delaware regular and vocational-technical secondary schools (44 of 59)
- 83% of regular and vocational-technical high schools (24 of 29)
- two-thirds of middle schools (20 of 30)
- three district or state programs (D.A.P.I. in Brandywine, the Positive Learning Center in Red Clay; Ferris School for Boys)

Two-thirds of candidates (66%) were enrolled by New Castle County districts, with the remaining third teaching in Kent and Sussex Counties.

All districts in the state, however, have been touched by the program. The one remaining regular public school district currently employs a graduate of the program. One of the remaining two vocational-technical districts also employs a graduate; the other has enrolled a candidate for the 2002 – 2003 school year.

Table I-1
District and School Participation
1997 – 1998 to 2001 – 2002 Cohorts (N=164)

NEW CASTLE COUNTY		108
Appoquinimink		9
Middletown Middle School	2	
Middletown Middle School	7	
Brandywine		18
Hanby Middle School	1	
Talley Middle School	5	
Brandywine High School	4	
Concord High School	4	
Mt Pleasant High School	3	
D.A.P.I.	1	
Christina		29
Gauger-Cobbs Middle School	4	
Kirk Middle School	2	
Shue-Medill Middle School	2	
Christiana High School	6	
Glasgow High School	6	
Newark High School	9	
Colonial		9
George Read Middle School	1	
William Penn High School	8	
Red Clay		24
Al duPont Middle School	1	
Conrad Middle School	1	
HB duPont Middle School	1	
Skyline Middle School	1	
Stanton Middle School	1	
Al duPont High School	6	
Dickinson High School	3	
Cab Calloway School of the Arts	2	
McKean High School	7	
Positive Learning Center	1	
New Castle Co Vo-Tech		3
Delcastle Technical High School	1	
Hodgson Vo-Tech High School	1	
Howard High School of Technology	1	
DSCYF		1
Ferris School for Boys	1	
Charters		15
Richard Milburn Academy	2	
The Charter School of Wilmington	13	

KENT & SUSSEX COUNTIES		56
Caesar Rodney		11
Fifer Middle School	1	
Caesar Rodney High School	10	
Cape Henlopen		2
Cape Henlopen High School	2	
Capital		8
Central Middle School	1	
Dover High School	7	
Delmar		2
Delmar Middle School	1	
Delmar High School	1	
Indian River		14
Indian River High School	5	
Sussex Central High School	9	
Lake Forest		4
Chipman Middle School	2	
Lake Forest High School	2	
Laurel		4
Laurel High School	4	
Milford		4
Milford Middle School	1	
Milford High School	3	
Seaford		3
Seaford Middle School	1	
Seaford High School	2	
Woodbridge		2
Woodbridge High School	2	
Charter		2
Positive Outcomes Charter School	2	

Candidate Profile

Districts enrolled 164 candidates in the first five ARTC cohorts. Table I-2 at the end of this section summarizes characteristics of these candidates by cohort.

Status in the Program. Over half (54%) of these candidates have completed their ARTC course work. Forty candidates (26%)) are currently enrolled or still working to complete their ARTC courses. Four (2%) are on leave from the program. Thirty-two candidates (20%) did not complete their ARTC courses (see Part II) .

Recruitment of Candidates Through ARTC. The program continues to help districts identify candidates for hard-to-fill positions. Between 55% and 65% of those enrolled in the last three cohorts were recruited through the ARTC office. These candidates learn about the ARTC program via the ARTC web site, word-of-mouth, or referral from schools, districts, university counseling centers, or program participants. They are counseled through the process of applying for certification, establishing eligibility, completing Praxis I requirements, and applying for teaching positions. The ARTC office also maintains a database of possible candidates in critical needs areas and shares this information with districts via e-mail and in response to specific requests from schools.

Personal Characteristics. Candidates in the first five cohorts have been evenly balanced by gender (49% women and 51% men). Twenty-nine percent are minority candidates (21% African-American; 6% Hispanic; 2% Asian) (Figure I-1). This is more than twice the proportion of minority teachers state-wide (13%). Most are in their 20's and 30's, when they enter the program (Figure I-2), with about one-quarter in their 40's and 50's. In the last two cohorts, however, there has been a shift from enrolling a majority of candidates in their 30's to enrolling more candidates in their 20's, 40's and 50's (Table I-2).

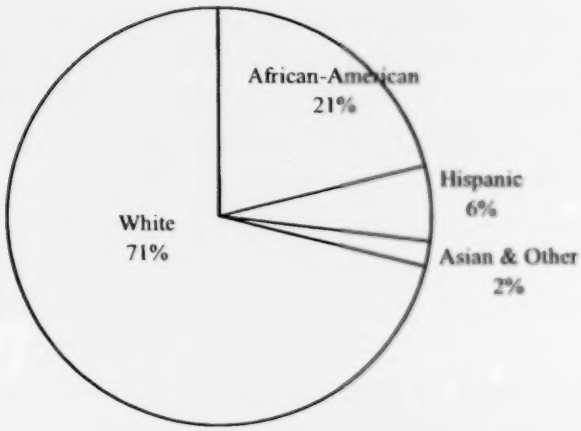

Figure I-1.
Proportion of Minority Candidates Enrolled 1997 – 1998 to 2000 - 2001 Cohorts (N = 164)

Figure I-2.
Age of Candidates Enrolled 1997 – 1998 to 2000 – 2001 Cohorts (N = 164)

College Degrees and GPAs. Almost one-third (31%) of those enrolled in the first five ARTC cohorts had one or more advanced degrees. One-quarter had one or more master's degrees and 6% had earned a doctorate in their subject areas. The last three cohorts enrolled significantly more candidates with one or more masters degrees (10% to 19% in the 1997 and 1998 cohorts versus 28% to 30% in

1999, 2000, and 2001). A majority (62%) had earned an overall GPA of 3.0 or higher for the highest degree earned. More recently enrolled candidates tend to have higher college GPAs. This may reflect the greater proportion with advanced degrees where GPAs tend to be higher.

Teaching Assignments. Most (81%) were employed at the high school level. About half (55%) were hired to teach science, business, and foreign languages (Figure I-3); another third taught mathematics, English, and technology education. Enrollments have grown in the sciences, technology education, mathematics, and English.

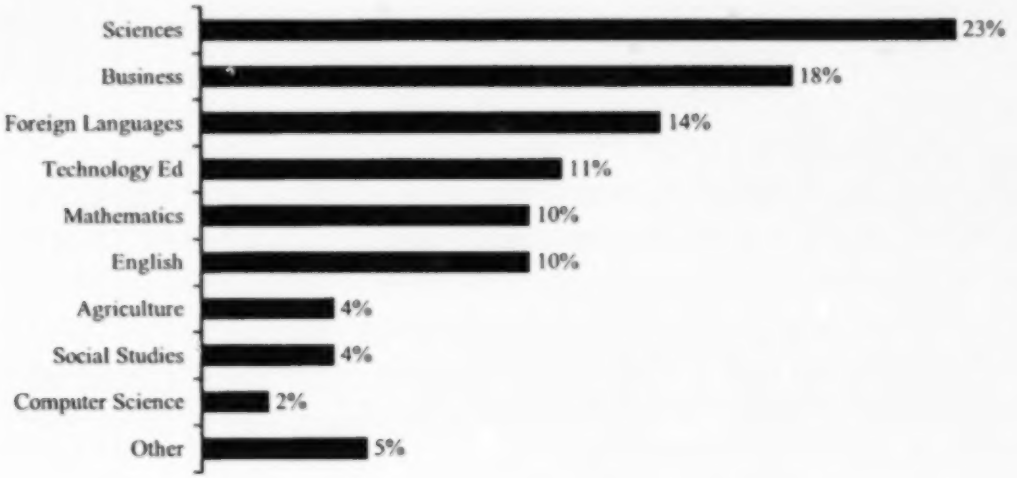

Figure I-3.
Subject Areas of Candidates Enrolled in 1997 – 1998 to 2000 – 2001 Cohorts (N = 164)

Employment Prior to Taking the ARTC Teaching Position. Most ARTC teachers come into teaching directly from other careers and professions (Figure I-4). In the year prior to taking their ARTC positions, about two-thirds (66%) were employed in business (39%), industry (19%) or government service (8%). One in four were employed in an educational setting (teaching full- or part-time, working as aides or paraprofessionals, or substitute teaching) for at least some portion of the year before enrolling in ARTC. This group is extremely varied, ranging from those who had been teaching

in private schools for as long as 17 years to those who substituted for a few months before being offered their ARTC position. A small number (9%) were full-time students or unemployed.

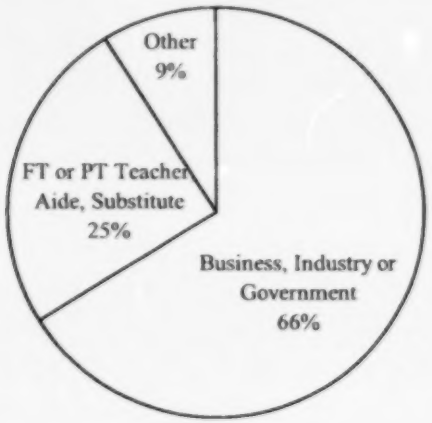

Figure I-4.
Employment Prior to Taking ARTC Position 1997 – 1998 to 2000 – 2001 Cohorts (N = 164)

Prior Education Course Work. Most candidates (59%) had taken no education courses prior to entering the program. For the most recent cohort, however, only 25% had already taken one or more education courses before entering the program, confirming that more ARTC teachers may now be moving directly into education from other careers. Six candidates (4%) already had a teaching certificate (primarily in elementary education) issued outside of Delaware.

Related Experience. Most candidates reported little or no experience related to teaching or working with children prior to entering the program (Figure I-5). About one-third of candidates reported substitute teaching (36%) or teaching full-time (33%) at some time before entering the program; another 26% had served as classroom aides or paraprofessionals. Only 17% had volunteered in schools. In the community, 33% reported volunteering in youth programs like scouting, Sunday school, or Little League, and 20% had coached youth sports. One-quarter had provided training for

adults in business, industry or the military, and one in five had previously taught at the college level. Again suggesting an increase in those moving into teaching directly from other occupations, candidates in recent cohorts are more likely to have trained others in business, industry or the military; taught at the college level; worked with community youth groups; and served as a substitute teacher (Table I-2).

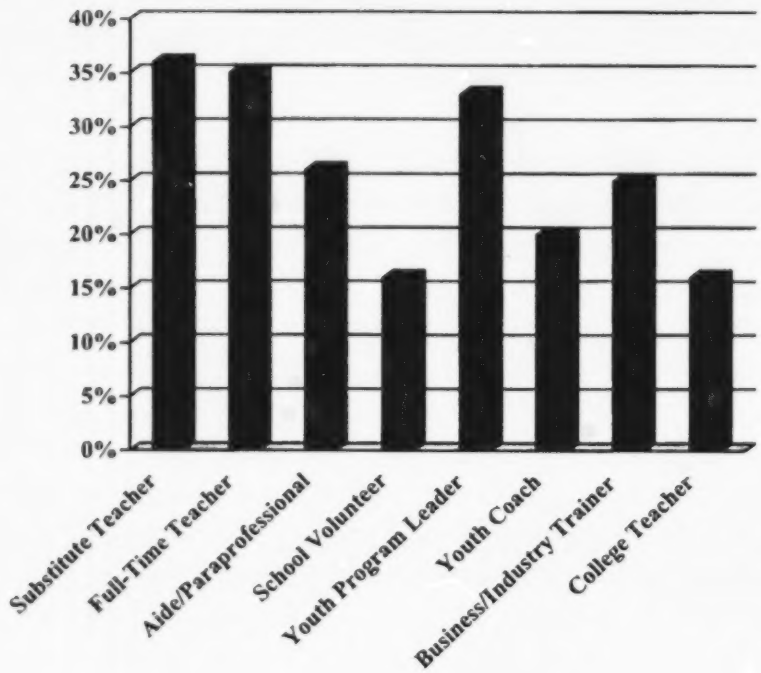

Figure I-5.
Prior Experience With Teaching or Children 1997 – 1998 to 2000 – 2001 Cohorts

Table I-2
Profile of All Candidates Enrolled in ARTC
1997 – 1998 to 2001 – 2002 Cohorts (N = 164)

COHORT:	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	TOTAL
COHORT TOTALS	**26 (16%)**	**22 (13%)**	**33 (20%)**	**39 (24%)**	**44 (27%)**	**164 (100%)**
STATUS IN PROGRAM						
Completed ARTC Courses	16 (62%)	17 (77%)	28 (85%)	27 (69%)		88 (54%)
Still Completing ARTC Courses				5 (13%)		5 (3%)
On Leave From Program				2 (5%)	2 (4%)	4 (2%)
Did Not Complete ARTC Courses	10 (38%)	5 (23%)	5 (15%)	5 (13%)	7 (16%)	32 (20%)
Currently Enrolled					35 (80%)	35 (21%)
RECRUITMENT						
thru ARTC	1 (4%)	4 (18%)	18 (55%)	23 (59%)	28 (64%)	74 (45%)
thru Schools	25 (96%)	18 (82%)	15 (45%)	16 (41%)	16 (36%)	90 (55%)
GENDER						
Female	7 27%)	15 (68%)	17 (52%)	18 (46%)	24 (55%)	81 (49%)
Male	19 (73%)	7 (32%)	16 (49%)	21 (54%)	20 (45%)	83 (51%)
MINORITY STATUS						
African-American	6 (23%)	4 (18%)	8 (24%)	5 (13%)	11 (25%)	34 (21%)
Hispanic		1 (5%)	3 (9%)	3 (8%)	3 (7%)	10 (6%)
Asian & Other	2 (8%)				1 (2%)	3 (2%)
Caucasian	18 (69%)	17 (77%)	22 (67%)	31 (80%)	29 (66%)	117 (71%)

COHORT:	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	TOTAL
AGE						
20 – 29	8 (31%)	7 (32%)	12 (37%)	16 (41%)	20 (47%)	63 (39%)
30 – 39	14 (54%)	11 (50%)	15 (46%)	11 (28%)	7 (16%)	58 (36%)
40 – 49	3 (12%)	2 (9%)	5 (15%)	8 (21%)	12 (28%)	30 (18%)
50 +	1 (4%)	2 (9%)	1 (3%)	4 (10%)	4 (9%)	12 (7%)
HIGHEST DEGREE EARNED						
Bachelor's	16 (76%)	15 (75%)	22 (69%)	26 (68%)	25 (63%)	104 (69%)
Master's	4 (19%)	2 (10%)	9 (28%)	11 (29%)	12 (30%)	38 (25%)
Doctorate	1 (5%)	3 (15%)	1 (3%)	1 (3%)	3 (8%)	9 (6%)
GPA (HIGHEST DEGREE EARNED)						
2.0 - 2.4	4 (27%)	1 (8 %)	7 (25%)	3 (8%)	2 (6%)	17 (13%)
2.5 - 2.9	4 (27%)	4 (33%)	7 (21%)	11 (31%)	5 (14%)	31 (25%)
3.0 - 3.4	5 (33%)	5 (42%)	8 (29%)	9 (25%)	13 (35%)	40 (31%)
3.5 - 4.0	2 (13%)	2 (17%)	7 (25%)	13 (36%)	16 (45%)	40 (31%)
GEOGRAPHIC AREA						
New Castle County	19 (73%)	16 (73%(	17 (52%)	24 (62%)	32 (73%)	108 (66%)
Kent and Sussex Counties	7 (27%)	6 (17%)	16 (48%)	15 (38%)	12 (27%)	56 (34%)
LEVEL TAUGHT						
High School	21 (81%)	17 (77%)	28 (85%)	29 (74%)	38 (86%)	133 (81%)
Middle School	5 (19%)	5 (23%)	5 (15%)	10 (26%)	6 (14%)	31 (19%)
PRIOR CERTIFICATION						
Yes	2 (8%)	0 (0%)	0 (0%)	0 (0%)	4 (9%)	6 (4%)
PRIOR ED COURSES						
None	10 (40%)	13 (62%)	19 (61%)	20 (52%)	30 (75%)	92 (59%)
One or More	15 (60%)	8 (38%)	12 (39%)	18 (47%)	10 (25%)	63 (41%)

COHORT:	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	TOTAL
SUBJECT AREA						
Sciences	7 (27%)	6 (27%)	7 (21%)	5 (14%)	12 (27%)	37 (23%)
Business	10 (39%)	4 (18%)	4 (12%)	5 (13%)	7 (16%)	30 (18%)
Foreign Languages	3 (12%)	6 (27%)	2 (6 %)	7 (18%)	5 (11%)	23 (14%)
Technology Education	3 (12%)	2 (9 %)	3 (9 %)	5 (13%)	5 (11%)	18 (11%)
Mathematics		2 (9 %)	3 (9 %)	7 (18%)	4 (9%)	16 (10%)
English			4 (12%)	5 (13%)	8 (18%)	17 (10%)
Agriculture	2 (8 %)	2 (9 %)	1 (3 %)	1 (3%)	1 (2%)	7 (4%)
Social Studies			4 (12%)	1 (3%)		5 (4%)
Computer Science	1 (4 %)			2 (5%)		3 (2%)
Other			5 (15%)	2 (6%)	2 (5%)	9 (5%)
EMPLOYMENT PRIOR TO ARTC						
Industry	5 (20%)	5 (23%)	4 (13%)	5 (13%)	10 (25%)	29 (19%)
Business	11 (44%)	6 (27%)	12 (39%)	15 (39%)	16 (40%)	60 (39%)
Government or Social Services	1 (4 %)	3 (14%)	3 (10%)	4 (11%)	2 (5%)	13 (8%)
Full-time Teaching	6 (24%)	5 (23%)	6 (19%)	7 (18%)	5 (13%)	29 (18%)
Part-time Teaching	1 (4%)	1 (5%)	4 (13%)	3 (8%)	2 (5%)	11 (7%)
Full-time Student	1 (4%)	1 (5%)	2 (7%)	4 (11%)	5 (13%)	13 (8%)
At Home or Unemployed		2 (10 %)				2 (1%)
RELATED EXPERIENCE (percentages within cohort may exceed 100%)						
Substitute Teacher	6 (24%)	6 (27%)	14 (45%)	17 (45%)	13 (32%)	56 (36%)
Full- or Part-Time Teacher	8 (32%)	6 (29%)	13 (42%)	10 (26%)	14 (34%)	51 (33%)
Youth Program Volunteer	3 (12%)	6 (29%)	13 (42%)	13 (34%)	17 (42%)	52 (33%)
Classroom Aide or Paraprofessional	5 (20%)	6 (29%)	9 (29%)	11 (29%)	9 (22%)	40 (26%)
Youth Coach	2 (8%)	3 (14%)	10 (32%)	9 (24%)	7 (17%)	31 (20%)
Teacher in Business or Military	1 (4%)	5 (24%)	7 (23%)	13 (34%)	13 (32%)	39 (25%)
College Teacher	3 (12%)	4 (18%)	7 (23%)	9 (24%)	10 (24%)	33 (21%)
School Volunteer	2 (8%)	6 (29%)	1 (3%)	9 (24%)	7 (17%)	25 (16%)

PART II

Attrition Among Candidates
1997 – 1998 to 2000 – 2001 Cohorts

This section addresses attrition among candidates who did not complete ARTC courses. Completion of all certification requirements and retention following completion of ARTC course work is separately reported in Part III.

Twenty-five of 120 candidates (21%) in the first four ARTC cohorts failed to complete their ARTC courses (Table II-1). There was a steady decline in the proportion of each cohort not completing their courses from 38% of the 1997 – 1998 cohort to 23% of the 1998 – 1999 cohort to 15% of the 1999 – 2000 cohort and to 13% of the 2001 – 2002 cohort.

Attrition among candidates in the last three cohorts (13% to 23%) compares favorably to national statistics reported by the National Education Association, indicating that about 20% of new teachers leave teaching by the end of the first year.

As indicated in Table II-1, performance in ARTC courses and/or in the classroom was an issue with only about half (13) of those who failed to complete the core program of courses and seminars. The remaining 12 candidates withdrew from the program for a variety of personal and professional reasons unrelated to satisfactory performance in courses or in the classroom. At least two of these candidates continued to teach in other positions in Delaware; at least one more completed certification via another route and is also still teaching in Delaware.

Table II-1
Attrition Among Candidates Enrolled in ARTC Courses
1997 – 1998 to 2000 – 2001 Cohorts

COHORT:	**1997 – 1998**	**1998 – 1999**	**1999 – 2000**	**2000 - 2001**	**TOTAL**
Candidates Enrolled	26	22	33	39	120
Did Not Complete ARTC Courses	10	5	5	5	25
Percent Attrition	**38%**	**23%**	**15%**	**13%**	**21%**
REASONS FOR NOT COMPLETING					
Candidates Who Left Due to Unsatisfactory Performance in Courses and/or in the Classroom	**5**	**3**	**2**	**3**	**13**
Candidates Who Withdrew For Other Reasons:					**12**
Withdrew: Completed Certification Via Another Route	*1*				
Withdrew: Took Other DE School Position (elementary; counseling)	*1*	*1*			
Withdrew – Position eliminated			*1*		
Withdrew – Moved out–of- state	*1*	*1*	*1*	*2*	
Withdrew – Left Teaching	*2*		*1*		

Candidates Who Completed Versus Those Who Did Not

The 88 candidates who completed their courses did not differ substantially from all 120 candidates enrolled in the first four cohorts on any demographic characteristic. This data is presented in the first part of Table II-2. The only possible exception was a greater tendency for Hispanic candidates to complete courses compared to other groups.

The second part of Table II-2 compares the completion rates by demographic characteristics of the somewhat smaller group of 88 candidates who completed ARTC courses and the 25 who did not. Completers and non-completers are again very similar across almost all measures. Successful

candidates did tend

- to be younger (in their 20's or 30's);
- to be employed in middle schools, as opposed to high schools;
- to be teaching social studies, mathematics, business, or technology education;
- to have taught part-time immediately prior to taking their teaching job;
- to have some prior experience as a classroom or substitute teacher; and
- to have worked with community youth groups.

These can only be regarded as very preliminary observations, but most are intuitively sensible: those who have worked with kids in or out of schools and shown prior interest (or actual experience) in teaching might be expected to make a smoother transition to teaching than those who have not had these experiences.

Table II-2

Comparison of Candidates Completing ARTC Courses With All Candidates Enrolled and With Those Who Did Not Complete Courses 1997 – 1998 to 2000 – 2001 Cohorts

	COMPARISON OF ALL CANDIDATES ENROLLED WITH THOSE WHO COMPLETED ARTC COURSES		PROPORTION OF CANDIDATES COMPLETING VERSUS NOT COMPLETING ARTC COURSES	
	ALL CANDIDATES ENROLLED	CANDIDATES COMPLETING	CANDIDATES COMPLETING	CANDIDATES NOT COMPLETING
NUMBER OF CANDIDATES	**120**	**88**	**88**	**25**
STATUS IN PROGRAM				
Completed ARTC Courses	88 (73%)	88 (100%)	88 (100%)	
Still Completing ARTC Courses	5 (4%)			
On Leave From Program	2 (2%)			
Did Not Complete ARTC Courses	25 (21%)			25 (100%)
RECRUITMENT				
thru ARTC	46 (38%)	33 (38%)	33 (79%)	9 (21%)
thru Schools	74 (62%)	55 (62%)	55 (77%)	16 (23%)
GENDER				
Female	57 (48%)	44 (50%)	44 (76%)	14 (24%)
Male	63 (52%)	44 (50%)	44 (71%)	18 (29%)

	ALL CANDIDATES ENROLLED	CANDIDATES COMPLETING	CANDIDATES COMPLETING	CANDIDATES NOT COMPLETING
MINORITY STATUS				
African-American	23 (19%)	15 (17%)	15 (68%)	7 (32%)
Hispanic	7 (6%)	7 (8%)	7 (78%)	2 (22%)
Asian & Other	2 (2%)	1 (1%)	1 (50%)	1 (50%)
Caucasian	88 (73%)	65 (74%)	65 (75%)	22 (25%)
AGE				
20 – 29	43 (36%)	30 (34%)	30 (71%)	12 (29%)
30 – 39	51 (42%)	41 (47%)	41 (80%)	10 (20%)
40 – 49	18 (15%)	13 (15%)	13 (68%)	6 (32%)
50 +	8 (7%)	4 (4%)	4 (50%)	4 (50%)
HIGHEST DEGREE EARNED				
Bachelor's	79 (71%)	62 (70%)	62 (79%)	17 (22%)
Master's or Doctorate	32 (28%)	26 (30%)	26 (79%)	7 (21%)
GPA FOR HIGHEST DEGREE				
2.0 - 2.4	15 (16%)	14 (17%)	14 (100%)	0 (0%)
2.5 - 2.9	26 (27%)	22 (28%)	22 (81%)	5 (19%)
3.0 - 3.4	27 (30%)	23 (29%)	23 (92%)	2 (8%)
3.5 - 4.0	24 (26%)	21 (26%)	21 (78%)	6 (22%)
GEOGRAPHIC LOCATION				
New Castle County	76 (63%)	56 (64%)	56 (73%)	21 (27%)
Kent & Sussex Counties	44 (37%)	32 (36%)	32 (74%)	11 (26%)
LEVEL TAUGHT				
High School	95 (79%)	65 (74%)	65 (68%)	31 (32%)
Middle School	25 (21%)	23 (26%)	23 (96%)	1 (4%)

	ALL CANDIDATES ENROLLED	CANDIDATES COMPLETING	CANDIDATES COMPLETING	CANDIDATES NOT COMPLETING
SUBJECT AREA				
Sciences	25 (21%)	18 (21%)	18 (69%)	8 (31%)
Business	23 (19%)	19 (22%)	19 (79%)	5 (21%)
Foreign Languages	18 (15%)	13 (15%)	13 (68%)	6 (32%)
Technology Education	13 (11%)	10 (11%)	10 (77%)	3 (23%)
Mathematics	12 (10%)	10 (11%)	10 (83%)	2 (17%)
English	9 (7%)	5 (6%)	5 (63%)	3 (37%)
Agriculture	6 (5%)	2 (2%)	2 (40%)	3 (60%)
Social Studies	5 (4%)	5 (6%)	5 (100%)	
Computer Science	3 (2%)	1 (1%)	1 (50%)	1 (50%)
Other	7 (6%)	5 (5%)	5 (71%)	2 (26%)
PRIOR ED COURSES				
None	62 (54%)	46 (52%)	46 (73%)	17 (27%)
One or More	53 (46%)	42 (48%)	42 (79%)	11 (21%)
PRIOR CERTIFICATION				
Yes	2 (2%)	1 (1%)	n/a	n/a
EMPLOYMENT PRIOR TO ARTC				
Industry	19 (16%)	14 (15%)	14 (74%)	5 (26%)
Business	44 (38%)	32 (36%)	32 (71%)	13 (29%)
Government or Social Services	11 (9%)	7 (8%)	7 (78%)	2 (22%)
Full-time Teaching	24 (21%)	19 (22%)	19 (76%)	6 (24%)
Part-time Teaching	9 (8%)	9 (10%)	9 (100%)	
Full-Time Student	8 (7%)	6 (7%)	6 (67%)	3 (33%)
At Home/Unemployed	2 (1%)	2 (2%)	2 (100%)	

	ALL CANDIDATES ENROLLED	CANDIDATES COMPLETING	CANDIDATES COMPLETING	CANDIDATES NOT COMPLETING
PRIOR RELATED EXPERIENCE +				
Substitute Teacher	43 (37%)	35 (40%)	35 (83%)	7 (17%)
Full- or Part-Time Teacher	37 (32%)	31 (35%)	31 (86%)	5 (14%)
Youth Programs	35 (30%)	30 (34%)	30 (83%)	6 (17%)
Classroom Aide or Paraprofessional	31 (21%)	20 (23%)	20 (61%)	13 (39%)
Youth Coach	24 (21%)	22 (25%)	22 (85%)	4 (15%)
Teacher in Business/Military	26 (22%)	19 (22%)	19 (60%)	8 (30%)
College Teaching	23 (20%)	14 (16%)	14 (67%)	7 (33%)
School Volunteer	18 (16%)	14 (16%)	14 (74%)	5 (26%)
COHORT TOTALS	**120 (100%)**	**88 (100%)**	**88 (100%)**	**25 (100%)**

+ Total percents within cohorts may exceed 100% due to individuals reporting more than one activity.

PART III

Follow-up Survey of ARTC Graduates 1997 – 1998 to 2000 – 2001 Cohorts

The 2002 Follow-Up Survey of ARTC Graduates

The 2002 Survey of Supervisors of ARTC Graduates (Appendix A) was designed to address the following questions:

- Are ARTC teachers staying?
- Are they succeeding in becoming certified and tenured?
- Are they effective in the classroom?

Surveys were sent to the current school supervisors of 79 of the 88 candidates in the 1997 – 1998 to 2000 – 2001 cohorts who had completed their ARTC course work. The remaining nine candidates were either no longer employed in a Delaware secondary public or charter school or were currently employed in an administrative position.

Surveys were returned by 76 of 79 supervisors (96%). Two of these surveys confirmed continued employment, but did not rate performance because the teacher had been on medical or military leave during the 2001 – 2002 school year, leaving a final sample of 74 of 79 teachers (94%). This also represents 94% of all candidates still employed in teaching positions targeted by the ARTC program (Table III-1). Retention data was obtained for all 88 candidates. Certification status was also independently determined for all candidates from Department of Education records.

Table III-1
2002 Supervisor Survey Returns

COHORT:	1997 – 1998	1998 – 1999	1999 – 2000	2000 – 2001	TOTAL
Completed ARTC Courses	16	17	28	27	88
Not Applicable *	2	3	2	2	9
Returned Without Ratings **		1		1	2
Not Returned By Supervisors	1		2		3
FINAL SAMPLE	**13**	**13**	**24**	**24**	**74**

* Candidates in administrative positions or who were no longer employed in a Delaware secondary public or charter school.
** Candidates still employed, but on medical or military leave during the 2001 – 2002 school year.

Are ARTC Teachers Staying?

Retention has been very high among ARTC graduates (Table III-2). Almost all (88%) of the 88 ARTC graduates in the first four cohorts are still teaching or performing administrative duties in Delaware public or charter secondary schools. Ninety-three percent are still teaching in a Delaware public, private or charter school.

Table III-2
Retention of ARTC Graduates (N=88)

COHORT:	1997 – 1998	1998 – 1999	1999 – 2000	2000 – 2001	TOTAL
Employed in DE Public or Charter Secondary School	**14 (88%)**	**13 (76%)**	**25 (88%)**	**25 (93%)**	**77 (88%)**
Resigned					**8 (10%)**
to teach in a DE public or charter elementary school	*1 (6%)*	*1 (6%)*			
to teach in a DE private school	*1 (6%)*	*1 (6%)*			
to teach in another state		*1 (6%)*	*1 (4%)*		
to raise a family			*1 (4%)*		
to return to prior job				*1 (4%)*	
Not Renewed		**1 (6%)**	**1 (4%)**	**1 (4%)**	**3 (2%)**
TOTAL	**16 (18%)**	**17 (19%)**	**28 (32%)**	**27 (31%)**	**88 (100%)**

Using the most conservative measure of "retention" (those who are still employed in the secondary public or charter schools that are specifically targeted by ARTC) and including the ARTC internship year, this translates to retention rates of 88% at 5 years; 76% at 4 years; 88% at 3 years; and 93% at 2 years. This compares favorably with estimates of 86% retention among alternatively-certified teachers nationally.

As indicated in III-2, very few candidates who successfully complete their ARTC courses are later not renewed due to unsatisfactory classroom performance (2%). Most (73%) who leave their positions after completing courses do so for personal or professional reasons unrelated to classroom performance, and many continue to teach. At least six are known to be still teaching, four in Delaware.

Are ARTC Teachers Succeeding in Becoming Certified?

Department of Education records were used to determine whether ARTC teachers who completed their courses also completed all certification requirements (Praxis I, any additional content-area courses required, documentation of their internship and school recommendation for certification). Table III-3 indicates that ARTC teachers who complete courses and are renewed by their school districts are successfully completing certification. Three-quarters have completed all certification requirements and have either received a Standard Certificate or are waiting for the paperwork to be processed by the Department of Education. Almost all of those in the first two cohorts (94%) have completed all requirements for the Standard Certificate. The remaining 21 teachers who are still completing requirements primarily need additional courses in their content areas.

Table III-3
Certification Status of ARTC Graduates (N=85)

COHORT:	1997 – 1998	1998 – 1999	1999 – 2000	2000 – 2001	TOTAL
Requirements Complete	**15 (94%)**	**15 (94%)**	**18 (67%)**	**16 (62%)**	**64 (75%)**
Certificate Issued	*15*	*13*	*16*	*8*	
Certificate In Process		*2*	*2*	*8*	
Requirements Not Yet Complete	**1 (6%)**	**1 (6%)**	**9 (33%)**	**10 (28%)**	**21 (25%)**
Needs content-area courses	*1*		*8*	*8*	
Needs Praxis I		*1*	*1*	*2*	
TOTAL	**16 (19%)**	**16 (19%)**	**27 (31%)**	**26 (31%)**	**85 (100%)**

Among candidates who are not already certified, all but one supervisor (96%) plans to recommend for certification at the appropriate time (Table III-4).

Table III-4
Supervisor Responses: Do you Plan to Recommend this Teacher for Certification?

COHORT:	1997 – 1998	1998 – 1999	1999 – 2000	2000 - 2001	TOTAL
Not Already Certified	1	1	9	19	**30**
Supervisors Responding	1	1	8	15	**25 (83%)**
Plan to Recommend	1	1	7	15	**24 (96%)**
Not Sure					
Do Not Plan to Recommend			1		**1 (1%)**

Are ARTC Teachers Succeeding in Becoming Tenured?

ARTC teachers' tenure status was assessed based upon agreement between the reports of candidates and their supervisors. ARTC teachers are being granted tenure, where applicable (Table III-5). All of those who are not yet tenured are working in settings where tenure is not an option (13% in administrative positions or in schools where tenure is not offered) or are not yet eligible (25%).

Table III-5
Tenure Status of ARTC Graduates (N=82)

COHORT:	1997 – 1998	1998 – 1999	1999 – 2000	2000 – 2001	TOTAL
Already tenured	12 (75%)	10 (67%)	5 (19%)	1 (4%)	**28 (35%)**
Not applicable (administrator, charter, private, state school)	2 (12%)	4 (27%)	2 (8%)	3 (12%)	**11 (13%)**
Not yet eligible	2 (13%)	1 (6%)	19 (73%)	21 (84%)	**43 (52%)**
TOTAL	**16 (19%)**	**15 (18%)**	**26 (33%)**	**25 (30%)**	**82 (100%)**

Almost all supervisors of untenured teachers (91%) plan to recommend for tenure at the appropriate time; none has firmly decided not to recommend (Table III-6).

Table III-6
Supervisor Responses: Do you Plan to Recommend this Teacher for Tenure?

COHORT:	1997 – 1998	1998 – 1999	1999 – 2000	2000 - 2001	TOTAL
Not Already Tenured	3	3	15	19	**40**
Supervisors Responding	3	3	12	17	**35 (88%)**
Plan to Recommend	3	3	11	15	**32 (91%)**
Not Sure			1	2	**3 (9%)**
Do Not Plan to Recommend					**0 (0%)**

Are They Succeeding in the Classroom?

Supervisors compared the overall performance of their ARTC teachers with the performance of other teachers at similar points in their careers using a 5-point scale from "much poorer" to "much better." Their responses indicate that ARTC teachers are performing very well in the classroom. All but one supervisor (99%) rated their ARTC teacher as performing as well as or better than their peers, and almost two-thirds (63%) were performing better ((Table III-7).

Table III-7
Supervisor Responses:
Based on your Experience With Other Teachers at Similar Points in their Careers, How Would you Compare the Overall Performance of your ARTC Teacher?

COHORT:	1997 – 1998	1998 – 1999	1999 – 2000	2000 - 2001	TOTAL
Much Better	5 (39%)	4 (31%)	3 (13%)	9 (38%)	**21 (28%)**
Somewhat Better	3 (23%)	5 (38%)	11 (46%)	7 (29%)	**26 (35%)**
About the Same	5 (38%)	4 (31%)	9 (38%)	8 (33%)	**26 (35%)**
Somewhat Poorer			1 (13%)		**1 (1%)**
Much Poorer					
TOTAL	**13 (18%)**	**13 (18%)**	**24 (32%)**	**24 (32%)**	**74 (100%)**
Mean	4.0	4.0	3.7	4.0	**3.5**
Standard Deviation	.91	.82	.76	.857	**.96**

Supervisors also evaluated their ARTC teacher's performance in several specific domains of teaching on a 5-point scale from 1 = "very weak" to 5 = "very strong." ARTC graduates are perceived as "strong" across all dimensions (Table III-8), especially in their knowledge of subject matter and conscientiousness as teachers. Supervisors were fairly consistent in their ratings of relative strengths and weaknesses across cohorts, though members of the 1998 – 1999 cohort were perceived as somewhat stronger in their instructional skills and the 1999 – 2000 cohort as somewhat weaker in instructional and management skills. There was a slight tendency for those with the more experience to be rated higher on classroom management skills.

Satisfaction with ARTC teachers appears high among supervisors. Based on their experiences with a particular ARTC teacher, all but one (99%) would be "somewhat" or "very likely" to recommend hiring another ARTC teacher in the future (Table III-9).

Table III-8
Supervisor Responses: How Would You Rate This Teacher's . . .

COHORT:	1997 – 1888		1998 – 1999		1999 – 2000		2000 – 2001		TOTAL	
How would you rate this teacher's *	Mean	Stdev	Mean	Stdev	Mean	StDev	Mean	StDev	**Mean**	StDev
conscientiousness as a teacher?	4.6	.51	4.4	.66	4.2	.76	4.4	.82	**4.4**	.72
knowledge of subject matter?	4.5	.52	4.5	.66	4.3	.70	4.4	.72	**4.4**	.67
rapport with students?	4.3	.95	4.6	.65	4.0	.95	4.3	.76	**4.3**	.82
ability to engage students in active learning?	4.2	.80	4.5	.66	3.7	.92	4.1	.78	**4.1**	.80
management of student behavior & activities?	4.5	.78	4.2	.73	3.5	.83	4.0	.78	**4.0**	.79
use of effective instructional strategies?	3.9	.80	4.3	.78	3.7	.92	4.0	.91	**3.9**	.87

* 1 = very weak, 2 = weak, 3 = adequate, 4 = strong, 5 = very strong

Table III-9
Supervisor Responses:
Based on your Experience with this Teacher, How Likely is it that you would Recommend Hiring an ARTC Teacher in the Future?

COHORT:	1997 – 1998	1998 – 1999	1999 – 2000	2000 - 2001	TOTAL
very likely	11 (85%)	12 (92%)	18 (75%)	18 (75%)	59 (80%)
somewhat likely	2 (15%)	1 (8%)	5 (21%)	6 (25%)	14 (19%)
not at all likely			1 (4%)		1 (1%)
TOTAL	**13 (18%)**	**13 (18%)**	**24 (32%)**	**24 (32%)**	**74 (100%)**

Special Accomplishments and Recognition of ARTC Teachers

ARTC teachers are very active professionally in their schools and beyond. Many have already made significant contributions to their schools and received recognition for those contributions. The following is only a partial listing of their numerous honors and accomplishments. It is based on informal communications, rather than systematic survey, and does not even attempt to catalogue their extensive contributions as coaches and club advisors.

School & District Honors

Teacher of the Year
- Ted Boyer (1999)
- Debra Certesio (1999)
- Gloria Clarke (several years)
- Hepsi Zsoldos (2002)
- Mike Buoni (nominated 2002)
- Bill Coughlin (nominated 2001 & 2002)
- Mark Feil (nominated 2001)

Teacher of the Month
- Chrystal Haas

Smyrna FEA "A+" Teacher for Science
- Stacy Cook (2002)

Named Department Chair
- Tiesha Niblet

State & National Honors

Sam's Club Teacher of the Year

Radioshack National Outstanding Teacher
- Stacy Cook (1999 – 2000)

Human Genome Project 2002 (Colorado)
- Mike Buoni

DECA Marketing Educator/Coordinator of the Year
- Valerie Jones (2002)

DOE Study Abroad Grant
- Gemez Tull (2001)

Fulbright Memorial Fund Teacher Program: Japan
- Tracy Woodson (2001)

NSTA/Toyota Tapestry Award

MBNA Integrated Science Curriculum Award
- Hepsi Zsoldos (2001)

Extreme Deep Sea Geology/Biology Program
- Tom Fleetwood
- Bob McDowell
- Hepsi Zsoldos

Professional Development

Masters Degrees Completed
Roger McMeekin (Secondary Administration)
Rick Shea (Curriculum & Instruction
Gemez Tull (Spanish)
Tracy Woodson (Educational Leadership)

Masters Degrees In Progress
Carolyn Barrett
Mike Buoni
Stacy Cook (Educational Technology)
Bill Coughlin (Educational Technology)
Jerry Jones (Educational Technology)
Tom Karpinski (Instruction)
Karen Rita
Kristin Schlegel
Andrea Shebest (Curriculum & Instruction)

DE Administrator Certification In Progress
Gloria Clarke
Pamela Moore

ARTC teachers contribute to the quality of instruction in their schools in a variety of ways. At least eleven ARTC graduates have obtained one or more grants for their programs. They have developed career pathways in technology, biotechnology and business, created a math fair for below-standards students, started a junior chapter of the Society for Black Engineers, created the only high school bank in Delaware, and developed school websites. ARTC science and technology teachers support competitive programs like Science Olympiad, Odyssey of the Mind, Environthon, US Physics Olympiad, and the Bridge Project. One ARTC math teacher reports that his school's DSTP math scores were second in the state in 2001 and first in 2002.

ARTC teachers are also active beyond their schools and districts. Graduates serve at the state level as members of committees like the Delaware Mentoring Council, Delaware Academy for School Leaders, and the Foreign Language Performance Indicator Review Committee. Mark Feil has published two books for beginning teachers, and presented a paper at the 2002 conference of the National Science Teachers Association.

PART IV

2002 – 2003 Completion and Enrollment Projections

Candidates Who are Expected to Complete Courses in 2002

Thirty-five candidates are eligible to complete their ARTC course work in 2002. Twenty-seven candidates in the 2001 – 2002 cohort are expected to complete in June or July 2002; an additional eleven candidates in Fall 2002. Of the five candidates in the 2000 – 2001 cohort still completing courses, four are expected to finish in June 2002 and one in Fall 2002. Based on past experience, several of these candidates are expected not to complete.

Candidates Enrolled to Begin Courses in 2002

Twenty-two new candidates have already been enrolled in the 2002 – 2003 cohort. These candidates represent 6 content areas (Table IV-1) and 11 districts: Appoquinimink (4), Caesar Rodney (2), Capital (1), Christina (2), Colonial (1), Indian River (4), Red Clay (5), Seaford (1), New Castle County Vo-Tech (1), Polytech (1). Two-thirds are teaching science or mathematics.

Table IV-1
Candidates Enrolled in the 2002 – 2003 Cohort as of May 1, 2002

COHORT:	Del State U	Univ of DE	TOTAL
CONTENT AREAS:			
Agriculture	1		1
Business		1	1
English	3		3
Foreign Languages	2	1	3
Mathematics		6	6
Sciences	3	5	7
TOTAL	**9**	**13**	**22**

Table IV-2 summarizes current enrollment projections for the 2001 Summer Institutes, assuming no attrition among current candidates. As was done last year, a second session of the Effective Teaching Strategies portion of the Summer Institute will be added to accommodate all candidates. Additional candidates can be accommodated at both sites.

Table IV-2
Projected Enrollment for Summer 2002 (as of May 1, 2002)

	COHORT:	2001 – 2002	2002 – 2003	Total
UD	Effective Teaching Strategies *	11	13	24
	Classroom Management		13	13
DSU	Effective Teaching Strategies	4	4	8
	Classroom Management	2	9	11

* Two sessions are planned at UD to accommodate all candidates.

To accommodate increasing enrollment in New Castle County last year, an additional cohort was formed in September 2001 of candidates hired too late for the Summer Institute. These candidates were enrolled in the Adolescent Development and Classroom Management course and a seminar in classroom management. A second 2002 – 2003 cohort is planned at the University of Delaware for Fall 2002, if enrollments require.

PART V

Patterns and Prospects

Meeting Goals

ARTC was designed to provide an accommodating path to teaching for high-quality individuals from other careers, to help Delaware secondary schools fill "critical needs," and to increase the pool of minority teachers. The program has made contributions in all of these areas.

Most ARTC teachers are coming directly from other professions, bringing with them a wealth of "real world" experience to share with students. Many already possess one or more graduate degrees in their subject areas, and there has been a recent trend toward even more candidates with advanced degrees and higher college GPA's. The proportion of minorities among ARTC teachers is twice the state average.

The ultimate measure of the quality of alternatively-certified teachers in Delaware is, of course, how well they perform in their classrooms. According to their supervisors, ARTC teachers are performing very well. There is no support for any initial concerns that ARTC might provide an "easy" route for poor quality teachers. ARTC candidates are being certified and retained only when they are performing as well as (or better than) their peers.

While it is difficult to obtain reliable data in all areas, it is clear that ARTC is beginning to have a significant impact in some subject areas. Recent research by Dr. Lydia Tucker, coordinator of the Delaware State business education program, indicates that as many as 15% of Delaware business education teachers are now (or are in the process of being) certified through ARTC. At least 10% of agriculture education teachers in the state are also now estimated to be certified through ARTC.

Further, investments in ARTC teachers are having a lasting impact. They are overwhelmingly

choosing to remain in teaching, almost all of them in Delaware schools.

Patterns of Growth

ARTC has experienced steady growth over its first five years. Starting with just 14 teachers in August 1997, by 1999 a second cohort was needed at Delaware State University to serve districts in Kent and Sussex counties, and two years later a third cohort was added to the one already in place at the University of Delaware to meet increasing demand in New Castle County.

A recent report on teacher shortages by Jeffrey Raffel and Stacy Savickas of the University of Delaware Institute for Public Administration (Delaware Teacher Supply Survey Analysis Report, April 2002) indicates that ARTC is likely to continue to grow in the future. Five of the six areas in which school districts report the most difficulty filling positions are covered by the ARTC program: mathematics, science, technology education, foreign languages and English.

The current three cohorts (one at Delaware State University and two at the University of Delaware) are expected to accommodate all candidates enrolled by districts in 2002 – 2003. The additional costs associated with the second University of Delaware cohort have been managed thus far within the existing budget, but may require a very modest funding increase in the future.

Growth in the number of ARTC candidates and other individuals seeking certification in "critical needs areas" has, however, already impacted the adequacy of financial aid. Many candidates experience difficulty paying course tuition and the need now exceeds the funds currently available for course reimbursement, loans and scholarships. Finding sufficient financial support for those seeking to teach subjects in which there is a shortage of certified teachers is an important future challenge.

Changing Enrollment Patterns

Changing demographics suggest that in the future more ARTC candidates will enroll with no classroom experience or prior education training. Recent ARTC candidates have been more likely to

enroll directly from positions in business and industry, and less likely to have taken any education courses prior to enrolling in the program. This trend is expected to continue. Candidates in early cohorts were often already working in schools and completing certification requirements. In contrast, shortages in areas like mathematics have recently become so acute that many possible candidates shared with districts during the school year have been hired within weeks. As a result, in the future we may also see more candidates facing the additional challenge of assuming responsibility for existing classes during the school year.

The relative proportions of candidates hired in different subject areas may also be changing. Since 2001, the program has focused only on secondary subjects identified as "critical needs" in the state of Delaware. As indicated in Figure V-1, we are seeing fairly steady enrollment in several subject areas, but significant growth in others: the sciences (especially the physical sciences), mathematics and English. Confirming the patterns identified by the recent Institute for Public Administration study (2002), two-thirds of the candidates already enrolled for 2002 – 2003 are teaching science or mathematics.

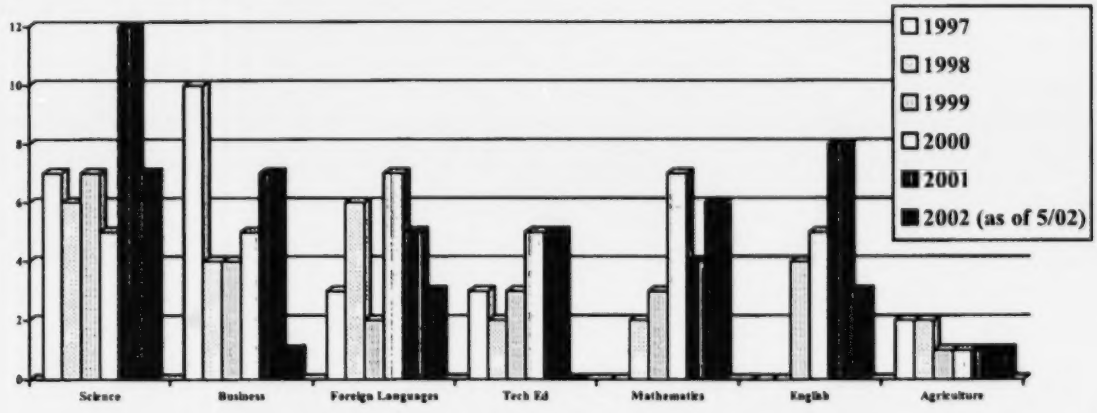

Figure V-1.
ARTC Enrollment In "Critical Needs" Subjects 1997 to May 2002

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These trends suggest that it will be especially important to continue obtaining detailed feedback from candidates throughout the program and to be prepared to adjust curriculum and instruction as needed. There also will clearly be a need for more materials that support instruction in science and math, as well as instructors and coaches with expertise in these subjects.

Current trends also suggest that the program's role in recruitment is likely to remain important in the future. The program does serve as a single point of contact for those interested in teaching, and was the first point of contact for most of the ARTC teachers hired in the last few years.

Hundreds of individuals inquire about the program each year, many with degrees in high-need areas. Major improvements were made this year to the ARTC website to better guide interested individuals through the process of establishing eligibility and finding a teaching job, and to make it easier to share information about potential candidates with district personnel offices and school staff. A process is now in place to help keep the database of potential candidates more current, and to make it easier to respond promptly to requests from schools.

For the first time this year, individuals who had contacted the ARTC office were invited to the Project Search teacher job fair at the University of Delaware. The Coordinator also has made a number of presentations for out-placement firms working in science and technology areas. More targeted presentations to other business and professional groups may also enhance future recruitment efforts.

Who Succeeds and Who Does Not

We have certainly learned that ARTC works for most, but not all teachers. We have also learned, unfortunately (though perhaps not surprisingly), that the demographic information we have compiled provides little guidance in predicting who will succeed and remain in teaching beyond a few intuitively sensible differences in prior experience with teaching or with groups of children.

Experience thus far suggests that improvements in program completion and retention may be difficult to achieve, except possibly through more careful selection. Most of the candidates who started the program, but are not still teaching in Delaware, left for personal or professional reasons unrelated to satisfactory course or classroom performance. As with any profession, it should be expected that some ARTC candidates and teachers will leave simply due to changing life circumstances we cannot anticipate or control.

Most losses occur early on. Candidates who complete their course work are very likely to complete certification and to stay in teaching; only very rarely are they later not renewed by their schools due to unsatisfactory classroom performance.

An obvious question is whether better support in the beginning might make a difference. Unfortunately, a review of the records of those who left the program due to unsatisfactory course and/or classroom performance, suggests that most often these cases involve an error in selection rather than a failure to support. Candidates who left due to unsatisfactory performance generally received very significant and individualized help both in their schools and through the program, but were not able to use it to improve performance. In the few cases when ARTC teachers failing in one school were hired elsewhere, almost all failed again.

A certain amount of error is likely to occur in selecting new teachers and it appears that ARTC teachers are no exception. A pre-selection process, used in some other alternative certification programs, might improve ARTC completion and retention rates, but this kind of process is very expensive and labor-intensive – and often there is scant data on the predictive validity of the measures used. Given the relatively small number of ARTC candidates who fail, it is not clear that such a process would be a cost-effective alternative to the current district- and school-based selection process.

On the other hand, there is evidence that stronger support might help candidates make a

smoother transition to teaching. Even successful candidates can initially experience difficulties in their classrooms, and candidates report considerable variation in the amount and quality of mentoring they receive. Scheduling often makes it difficult for candidates to meet with their mentors or to observe other experienced teachers. More accessible and consistent mentoring, along with release time to visit other classrooms, are very high priorities among candidates and important goals for the future.

Future Directions

Current trends suggest that in the future

- ARTC enrollments will continue to increase;
- additional sources of financial aid will be needed;
- curriculum and instruction may need to be adapted to candidates with less prior education experience or training, and to more candidates teaching science and mathematics; and
- there will be an ongoing need to help recruit candidates for hard-to-fill positions.

Broader issues that should be considered in future planning, but would require more basic changes in the way the program is currently structured, include possible pre-selection of at least some ARTC candidates and developing ways to strengthen the mentoring of candidates in their schools.

Appendix A.
Survey of Supervisors of ARTC Graduates (March 2002)

ARTC Teacher: «FIRST» «LAST»
School: «SCHOOL»
Name of Supervisor *(please correct)*: «SUPERVISOR»
What is your position in the school? _____
How long has this teacher worked in your school? _____
How long have you supervised this teacher? _____

I. Are ARTC teachers staying?

Is this teacher still teaching in your school? yes no

If no, has this teacher taken a job at another school? where? _____
left teaching? when? _____
why? resigned not renewed
other: _____

II. Are ARTC teachers succeeding?

Based on your experience with other teachers at similar points in their careers, how would you compare the overall performance of your ARTC teacher?

much poorer somewhat poorer about the same somewhat better much better

Is teacher already CERTIFIED? yes no don't know

If no, do you plan to recommend this teacher for certification? yes no not sure

Is this teacher already TENURED? yes no not yet eligible not applicable don't know

If no, do you plan to recommend this teacher for tenure? yes no not sure N/A

Based on your experience with this teacher, how likely is it that you would recommend hiring an ARTC teacher in the future? don't know not at all likely somewhat likely very likely

III. What are their strengths and weaknesses?

How would you rate this teacher's

	don't know	*very weak*	*weak*	*adequate*	*strong*	*very strong*
knowledge of subject matter?	0	1	2	3	4	5
use of effective instructional strategies?	0	1	2	3	4	5
ability to engage students in active learning?	0	1	2	3	4	5
rapport with students?	0	1	2	3	4	5
management of student behavior and activities?	0	1	2	3	4	5
conscientiousness as a teacher?	0	1	2	3	4	5

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